

Concepts and Algorithms of Optimization – Series 6

www.math.uni-magdeburg.de/institute/imo/teaching/wise18/cao/

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Exercise 1

Consider the production planning problem of the *H₂O Chemicals Corp.* described in Exercise 1 of Series 4.

- (a) Formulate a mathematical program in AMPL, which is able to answer the question of the shop floor manager for the maximum number of simultaneously executable tasks. Solve the corresponding problem.
- (b) Give an optimization model referring to the interest of the CEO on the minimum amount of processing time. Implement it in AMPL and solve the problem.

Hint: For both questions, you can use the models presented in the lecture and provided on the webpage.